CLAIM AMENDMENTS

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims

1 – 17. (Canceled)

18. (Currently Amended) A ~~software readable~~ computer-readable medium containing instructions for scheduling tasks within a computing device, comprising:

a) instructions for accessing a multi-level work queue of a plurality of waiting tasks awaiting scheduling~~, said~~, said waiting tasks being ordered in said multi-level work queue according to an associated priority;

b) instructions for attempting to locate at least one selected task from within the

work queue which is capable of being executed simultaneously with the first task, and wherein the ~~processor~~ computer-readable medium further comprises instructions for selecting, as the first task, a waiting task for which no other waiting task has a higher priority;

c) said instructions for attempting to locate at least one selected task comprising instructions for considering only waiting tasks having a priority equal to that of the first task; and

d) instructions for combining the at least one selected task with the first task to form a combined task and scheduling the combined task, in the event that at least one selected task is located.

19 - 20. (Canceled)

21. (Previously Presented) A processor for scheduling a first task within a computing device, comprising:

a) instructions for accessing a work queue of a plurality of waiting tasks waiting scheduling;

b) instructions for determining whether the computing device has sufficient resources to execute the first task and for determining whether the first task is time sensitive, in the event that the computing device does not have sufficient resources to execute the first task;

c) instructions for attempting to locate at least one selected task from within the work queue which is capable of being executed simultaneously with the first task, in the event that the computing device has sufficient resources to execute the first task, and for rejecting the first task, in the event that the computing device does not have sufficient resources to execute the first task and that the first task is time sensitive;

d) instructions for combining the at least one selected task with the first task to form a combined task and scheduling the combined task, in the event that the computing device has sufficient resources to execute the first task and that at least one selected task is located; and

e) instructions for attempting to schedule a second task before attempting to schedule the first task, in the event that the computing device does not have sufficient resources to execute the first task and that the first task is not time sensitive.

22. (Currently Amended) A ~~software-readable~~ computer-readable medium comprising instructions for scheduling a first task within a computing device, comprising:

a) instructions for accessing a work queue of a plurality of waiting tasks awaiting scheduling and for determining whether the first task is time sensitive, in the event that the computing device does not have sufficient resources to execute the first task;

b) instructions for determining whether the computing device has sufficient resources to execute the first task and for rejecting the first task, in the event that the computing device does not have sufficient resources to execute the first task and that the first task is time sensitive;

c) instructions for attempting to locate at least one selected task from within the work queue which is capable of being executed simultaneously with the first task, in the event that the computing device has sufficient resources to execute the first task and for attempting to schedule a second task before attempting to schedule the first task, in the event that the computing device does not have sufficient resources to execute the first task and that the first task is not time sensitive; and

d) instructions for combining the at least one selected task with the first task to form a combined task and scheduling the combined task, in the event that the computing device has sufficient resources to execute the first task and that at least one selected task is located.

23 - 26. (Canceled)

27. (Currently Amended) A method for scheduling tasks within a computing device, comprising:

a) accessing a multi-level work queue of a plurality of waiting tasks awaiting scheduling; said waiting tasks being ordered in said multi-level work queue according to an associated priority;

b) attempting to locate at least one selected task from within the work queue which is capable of being executed simultaneously with the first task, considering only waiting tasks having a priority equal to that of the first task, and selecting as the first task a waiting task for which no other waiting task has a higher priority; and

~~d)~~c) combining the at least one selected task with the first task to form a combined task and scheduling the combined task, in the event that at least one selected task is located.

28. (Previously Presented) A processor for scheduling tasks within a computing device, comprising:

a) instructions for accessing a multi-level work queue of a plurality of waiting tasks awaiting scheduling; said waiting tasks being ordered in said multi-level work queue according to an associated priority;

b) instructions for attempting to locate at least one selected task from within the work queue which is capable of being executed simultaneously with the first task and each task has an associated priority, and wherein the processor further comprises instructions for selecting as the first task a waiting task for which no other waiting task has a higher priority;

c) instructions for attempting to locate at least one selected task comprisig instructions for considering only waiting tasks having a priority equal to that of the first task; and

d) instructions for combining the at least one selected task with the first task to form a combined task and scheduling the combined task, in the event that at least one selected task is located.

29. (Previously Presented) A method for scheduling a first task within a computing device, comprising the steps of:

a) accessing a work queue of a plurality of waiting tasks waiting scheduling;

b) determining whether the computing device has sufficient resources to execute the first task and for determining whether the first task is time sensitive, in the event that the computing device does not have sufficient resources to execute the first task;

c) attempting to locate at least one selected task from within the work queue which is capable of being executed simultaneously with the first task, in the event that the computing device has sufficient resources to execute the first task, and rejecting the first task, in the event that the computing device does not have sufficient resources to execute the first task and that the first task is time sensitive;

d) combining the at least one selected task with the first task to form a combined task and scheduling the combined task, in the event that the computing device has sufficient resources to execute the first task and that at least one selected task is located; and

e) attempting to schedule a second task before attempting to schedule the first task, in the event that the computing device does not have sufficient resources to execute the first task and that the first task is not time sensitive.

30. (Currently Amended) A processor for scheduling a first task within a computing device, comprising:

a) instructions for accessing a work queue of a plurality of waiting tasks waiting scheduling;

b) instructions for determining whether the computing device has sufficient resources to execute the first task and for determining whether the first task is time sensitive, ~~in the event that~~ when the computing device does not have sufficient resources to execute the first task; ~~and~~

c) instructions for attempting to schedule a second task before attempting to schedule the first task, ~~in the event that~~ when the computing device does not have sufficient resources to execute the first task and ~~that~~ the first task is not time sensitive; and

d) instructions for rejecting the first task such that the first task is immediately eligible for retrieval when the computing device does not have sufficient resources to execute the first task and the first task is time sensitive.

31. (Currently Amended) A ~~software-readable~~ computer-readable medium comprising instructions for scheduling a first task within a computing device, comprising:

a) instructions for accessing a work queue of a plurality of waiting tasks awaiting scheduling and for determining whether the first task is time sensitive, in the event that the computing device does not have sufficient resources to execute the first task;

b) instructions for determining whether the computing device has sufficient resources to execute the first task and for rejecting the first task, in the event that the computing device does not have sufficient resources to execute the first task and that the first task is time sensitive; and

c) instructions for combining the at least one selected task with the first task to form a combined task and scheduling the combined task, in the event that the computing device has sufficient resources to execute the first task and that at least one selected task is located.

32. (Currently Amended) A method for scheduling a first task within a computing device, comprising the steps of:

a) accessing a work queue of a plurality of waiting tasks waiting scheduling;

b) determining whether the computing device has sufficient resources to execute the first task and for determining whether the first task is time sensitive, ~~in the event that~~ when the computing device does not have sufficient resources to execute the first task; ~~and~~

c) attempting to schedule a second task before attempting to schedule the first task, ~~in the event that~~ when the computing device does not have sufficient resources to execute the first task and ~~that~~ the first task is not time sensitive; and

d) rejecting the first task such that the first task is immediately eligible for retrieval when the computing device does not have sufficient resources to execute the first task and the first task is time sensitive.